

REMARKS

The specification has been reviewed, and clerical errors of the specification have been corrected.

On page 3 of the Action, claims 6-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al. (U.S. Pub 2002/0047568) in view of applicant admitted prior art (AAPA).

In view of the rejections, claims 6 and 12 have been amended to include additional limitations, and claims 10 and 15 have been cancelled. Claims 1-5 as non-elected invention have been cancelled. New claims 17-19 readable on Group II in the restriction requirement have been filed.

As recited in claim 6, a method for producing an organic EL display of the invention comprises the steps of: preparing an organic EL light emitting element by forming a first electrode, an organic EL layer and a second electrode on a substrate; preparing a color conversion filter by forming a color conversion filter layer on a transparent substrate; forming a partition wall by using a photosensitive photoresist around a periphery of the color conversion filter layer; forming an outer sealing wall by using an ultraviolet setting adhesive at an outer side of the partition wall; filling an inside of the partition wall with a filler; adhering the organic EL light emitting element and the color conversion filter while aligning with each other; and curing the outer sealing wall.

In particular, in claim 6, the partition wall is formed by using a photosensitive photoresist around a periphery of the color conversion filter layer. Accordingly, it is possible to form the partition wall precisely at a predetermined position on the substrate by applying the photoresist with spin coating, dip coating or roll coating method, and then by patterning the photoresist with photolithography. Alternatively, it is possible to form the partition wall in a desired shape on a film substrate treated with a silicone layer, and by transferring the partition wall to a predetermined position on the substrate.

Further, in claim 6, the outer sealing wall is formed by using an ultraviolet setting adhesive at an outer side of the partition

wall. The ultraviolet setting adhesive does not exhibit viscosity change before setting. Accordingly, it is possible to precisely align the color conversion filter layer with the organic EL light emitting element.

Koyama discloses a method of driving display device. In the EL display device as disclosed FIGS. 15B and 16 in Koyama, a pixel portion 6803 and a driver circuit 6801 are formed on the substrate 6800. Each pixel in the pixel portion 6803 has color filters 6855 and 6856 for extracting a specific color. The EL display device is covered with the cover material 6804. The first sealing material 6805 is formed with a dispenser or the like between the cover material 6804 and the substrate 6800. In addition, the second sealing material 6806 is formed to cover the exposed portion of the first sealing material 6805.

In claim 6 of the invention, the partition wall is formed by using the photosensitive photoresist, and the outer sealing wall is formed by using the ultraviolet setting adhesive. The examiner regards the first sealing material 6805 of Koyama as the partition wall of the invention, and the second sealing material 6806 as the outer sealing wall of the invention. However, Koyama is silent to the materials for the first sealing material 6805 and the second sealing material 6806. Koyama merely states that the second sealing material 6806 may use the same material as the first sealing material 6805 (paragraph 0243).

The examiner referred to paragraph 0161 in Koyama as the disclosure of the ultraviolet setting adhesive. However, in paragraph 0161, Koyama states that it is preferable to perform packaging (sealing) using a protecting film (such as a laminated film or an ultraviolet cured resin film) after completing through the state of FIG. 10B. Therefore, according to Koyama, the ultraviolet cured resin film packages the device shown in FIG. 10B, and the ultraviolet cured resin film is not shown in FIG. 10B. In Koyama, there is no disclosure that such an ultraviolet cured resin film is used in the device shown in FIGS. 15B and 16 to form the second sealing material 6806 corresponding to the outer sealing wall of the invention. Further, Koyama does not disclose the use

of the photosensitive photoresist to form the first sealing material 6805 corresponding to the partition wall of the invention.

Further, claim 6 of the invention includes the steps of forming the partition wall, forming the outer sealing wall and filling the inside of the partition wall with the filler, but Koyama is different in the manufacturing steps of forming the partition wall, filling the filler and forming the outer sealing wall. Namely, the manufacturing order of forming the outer sealing wall and filling the filler of the invention is reverse with respect to that of Koyama.

In this respect, in the invention, since the viscosity of the material for forming the outer sealing wall is generally high, the outer sealing wall is formed before filling the filler in considering the stability of form after forming the outer sealing wall. On the other hand, in Koyama, the filler is injected through an opening formed in the partition wall and then, the opening is closed. Therefore, it is impossible to form the outer sealing wall before providing the filler.

Still further, the first sealing material in Koyama does not operate as the partition wall but primarily operates for sealing. In this respect, Koyama is also different from the invention. In Koyama, the partition wall mainly operates as a surrounding wall by a sealing material will adhesive property, but in the invention, the partition wall does not have adhesive property and is formed to separate the filler from the outer sealing material.

Therefore, Koyama does not disclose or even suggest the features of the invention, as recited in claim 6.

In the conventional organic EL display shown in Fig. 6 in the present application, the TFTs 604, anodes 606, organic EL layer 608 and cathode 610 are formed on the substrate 602. The color conversion filter layer 612 and black mask 614 are formed on the transparent substrate 616. The outer sealing wall 618 is formed around a periphery of the substrate 602 to adhere to the transparent substrate 616. However, the conventional organic EL display does not have the partition wall formed of the photosensitive photoresist. Therefore, AAPA does not disclose or

suggest the features of the invention recited in claim 6.

As recited in claim 12, a method for producing an organic EL display of the invention comprises the steps of: preparing an organic EL light emitting element by forming a first electrode, an organic EL layer and a second electrode on a substrate; preparing a color conversion filter by forming a color conversion filter layer on a transparent substrate; forming a partition wall by using a photosensitive photoresist around a periphery of the organic EL light emitting element; forming an outer sealing wall by using an ultraviolet setting adhesive at an outer side of the partition wall; filling an inside of the partition wall with a filler; adhering the organic EL light emitting element and the color conversion filter while aligning with each other; and curing the outer sealing wall.

In the invention recited in claim 12, similar to claim 6, the partition wall is formed by using a photosensitive photoresist around a periphery of the organic EL light emitting element. Accordingly, it is possible to form the partition wall precisely at a predetermined position on the substrate by applying the photoresist with spin coating, dip coating or roll coating method, and then by patterning the photoresist with photolithography. Alternatively, it is possible to form the partition wall in a desired shape on a film substrate treated with a silicone layer, and by transferring the partition wall to a predetermined position on the substrate. Further, in claim 12, the outer sealing wall is formed by using an ultraviolet setting adhesive at an outer side of the partition wall. The ultraviolet setting adhesive does not exhibit viscosity change before setting. Accordingly, it is possible to precisely align the color conversion filter layer with the organic EL light emitting element.

As explained before, in Koyama, there is no disclosure that the ultraviolet setting adhesive is used for the second sealing material 6806 corresponding to the outer sealing wall of the invention. Further, Koyama does not disclose the use of the photosensitive photoresist to form the first sealing material 6805 corresponding to the partition wall of the invention. Therefore,

Koyama does not disclose or suggest the features of the invention recited in claim 12. Similarly, the conventional organic EL display disclosed in the application does not have the partition wall formed of the photosensitive photoresist. Therefore, AAPA does not disclose or suggest the features of the invention recited in claim 12.

Further, in new claims 17-19, it is clearly specified that the organic EL light emitting element and color conversion filter are formed separately, and are aligned and adhered together. These steps are not disclosed or suggested in the cited references.


As explained above, the cited references do not disclose or suggest the features of the invention. Even if the cited reference and AAPA are combined, the invention is not obvious.

Reconsideration and allowance are earnestly solicited.

One month extension of time is hereby requested. A credit card authorization form in the amount of \$120.00 is attached herewith for the one month extension of time.

Respectfully submitted,

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